

In the Claims:

The claims are as follows:

1. (Currently Amended) A method comprising:

providing a performance system;

measuring an initial measurement of a first parameter of a trainable subject;

providing a control system for controlling a second parameter, wherein the second parameter is a parameter of the performance system;

setting an initial point of efficiency of the trainable subject with respect to the initial measurement of the first parameter;

determining a range of tolerance, using the control system, surrounding the initial point of efficiency;

starting a timer to measure an elapsed time of a given activity;

training the trainable subject within the range of tolerance of the initial point of efficiency;

determining, using the control system, for [a] the given activity, a new point of efficiency of the trainable subject with respect to the first parameter, wherein the new point of efficiency is determined by repeatedly increasing stress on the trainable subject by controlling the second parameter and then ~~re-measuring~~ measuring a current measurement of the first parameter of the trainable subject, the current measurement measured after the initial measurement and before the timer is stopped, the first parameter until just prior to the trainable subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the first parameter to vary more rapidly or less rapidly, wherein a rate of the variance of the first parameter increases or decreases with respect to the second parameter;

wherein the type of stress increased by the control system includes physical activity, environmental hostility, emotional stress, and mathematical calculations, the type of stress actually increased during the training of the trainable subject by the control system corresponds to the trainable subject that is responsive to that stress;

determining a range of tolerance, using the control system, surrounding the point of efficiency; stopping the timer, using the control system, when the current measurement of the first parameter is outside of the range of tolerance;

recording a length of time in which the trainable subject remained in a state of accommodation, wherein the trainable subject remains in a state of accommodation until the current measurement of the first parameter is outside the range of tolerance; and

training the trainable subject within the range of tolerance of the point of efficiency; and

repeating the method, including:

determining a new range of tolerance, using the control system, surrounding the new point of efficiency;

training the trainable subject within the new range of tolerance of the new point of efficiency;

wherein the new point of efficiency is recalculated and changes each repetition of the method.

2-3. (Cancelled).

4. (Previously Presented) The method of claim 1, wherein the first parameter is one of a physical parameter, emotional parameter, and mental parameter of the trainable subject.

5. (Previously Presented) The method of claim 4, wherein the first physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, weight lifted, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

6. (Previously Presented) The method of claim 4, wherein the first physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate, VO_2 , perspiration rate, metabolic rate, blood flow, breathing rate, heat given off, and breath length.

7. (Previously Presented) The method of claim 4, wherein the first parameter is observed by a signal selected from the group of verbal utterance, physical motion.

8. (Previously presented) The method of claim 1, wherein the trainable subject is selected from the group consisting of an animal, a human, a group of humans, a group of animals, a cellular automata, a group of cellular automata, microbes, and plants.

9-16. (Withdrawn)

17. (Currently Amended) A method comprising:

providing a performance system;

measuring an initial measurement of at least one first parameter, wherein the at least one first parameter is a parameter of a subject;

activating the performance system;

recording at least one second parameter, wherein the at least one second parameter is a parameter of the performance system;

setting an initial point of efficiency of the subject with respect to the initial measurement of the at least one first parameter;

determining a tolerance function surrounding the initial point of efficiency;

starting a timer to measure an elapsed time of a given activity;

training the subject within the tolerance function of the initial point of efficiency;

determining a new point of efficiency of the subject with respect to of the at least one first parameter ~~with respect to a state of accommodation~~ by changing the at least one second parameter to increase stress on the subject, and then, at least once, measuring a current measurement of the at least one first parameter of the subject, the current measurement being the last measurement before the timer is stopped ~~re-measuring the at least one first parameter and repeating the stress increase and re-measuring, until the at least one first parameter substantially changes beyond a given tolerance function;~~ wherein the new point of efficiency occurs just prior to the subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the at least one first parameter to vary ~~more rapidly or less rapidly;~~ wherein a rate of the variance of the first parameter increases or decreases with respect to the at least one second parameter;

wherein a type of stress increased on the subject just prior to reaching the new point of efficiency includes one or more of physical activity, environmental hostility, emotional stress, and mathematical calculations, the type of stress corresponding to the subject;

determining a range of tolerance surrounding the point of efficiency;

stopping the timer when the current measurement of the at least one first parameter is outside of the tolerance function;

recording a length of time in which the subject remained in a state of accommodation, wherein the subject remains in a state of accommodation until the current measurement of the at least one first parameter is outside the tolerance function; and

~~training the subject within said range of tolerance of the point of efficiency so the duration the subject can maintain the point of efficiency changes; and~~

repeating the method, including:

determining a new tolerance function surrounding the new point of efficiency;

training the trainable subject within the new tolerance function of the new point of efficiency;

wherein the new point of efficiency is recalculated and changes each repetition of the method.

18. (Previously Presented) The method of claim 17, wherein the at least one first parameter is a physical parameter.

19. (Original) The method of claim 18, wherein the physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

20. (Original) The method of claim 18, wherein the physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate, VO_2 , perspiration rate, metabolic rate, blood flow, breathing rate, and breath length.

21-33. (Withdrawn)